FIG. 1A

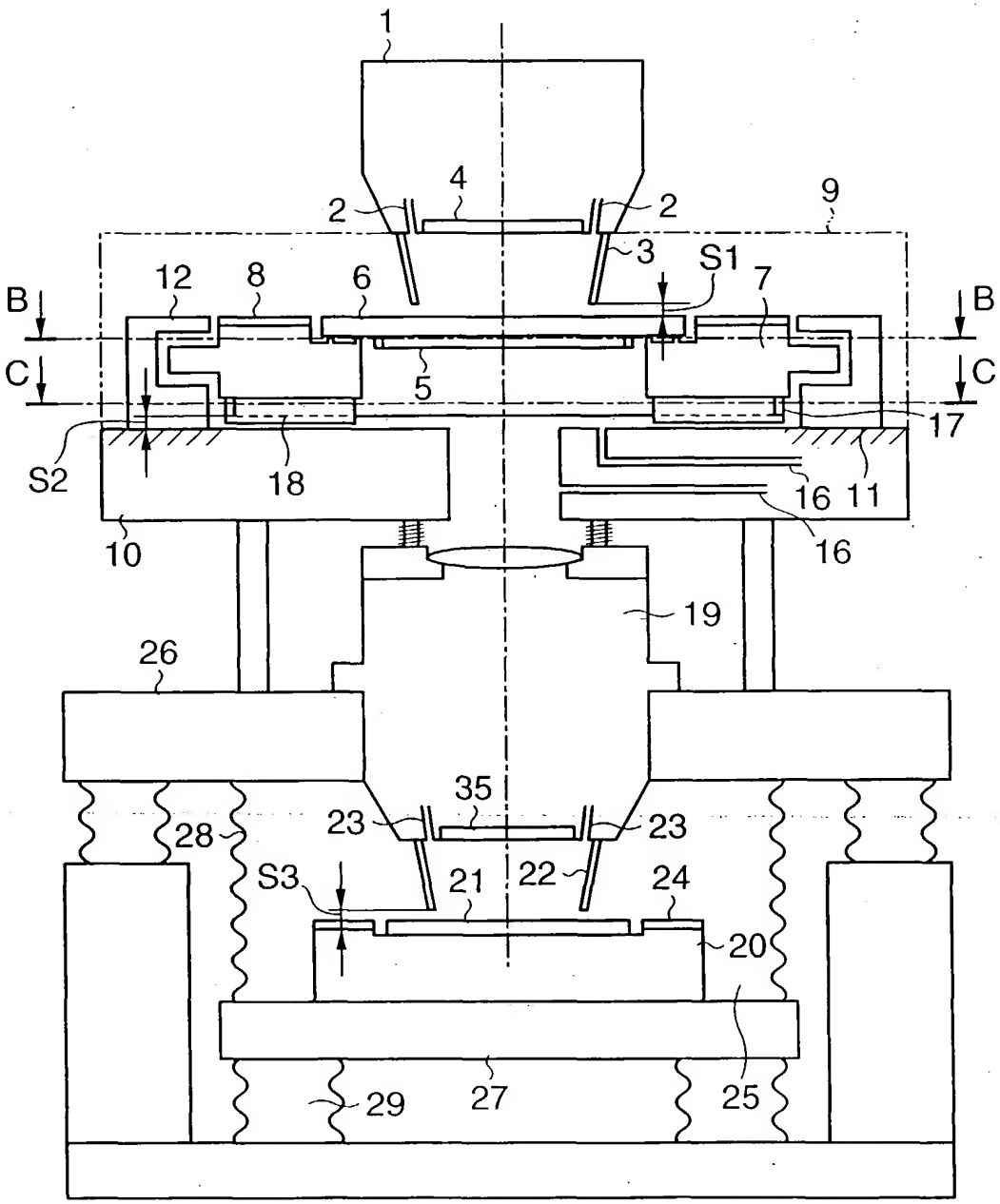

1
4
2
2
9
3
S1
12
8
6
7
B
B
C
C
5
17
S2
18
16
11
10
16
19
26
35
23
23
28
S3
21
22
24
20
29
27
25

FIG. 1B

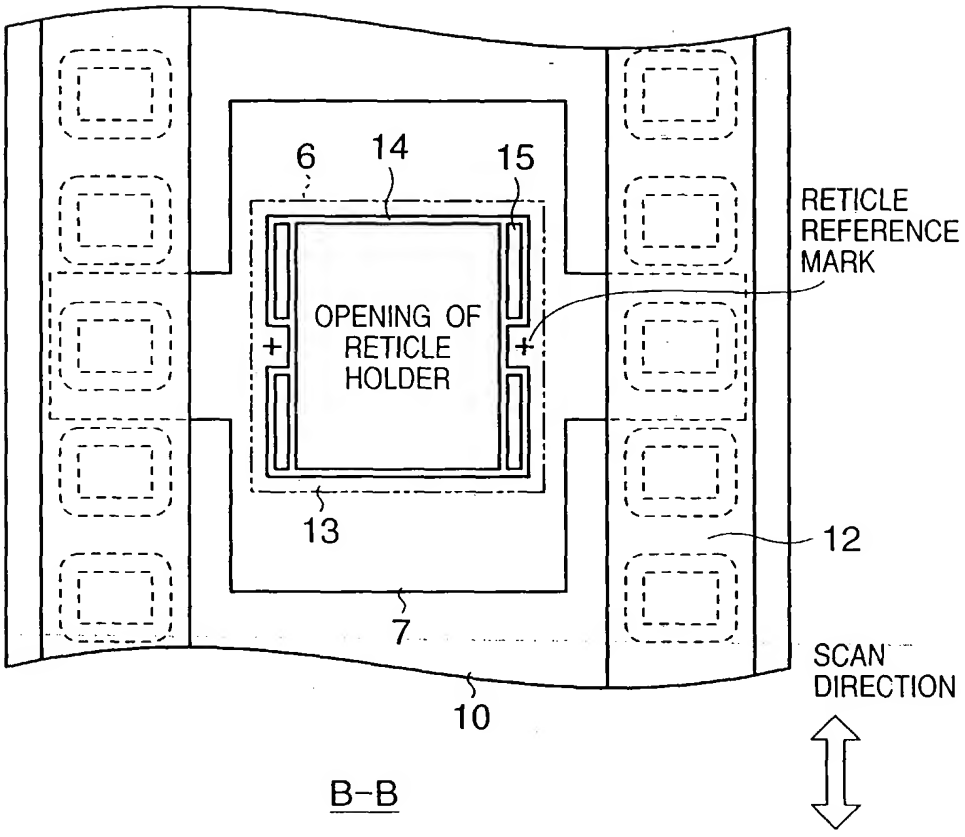
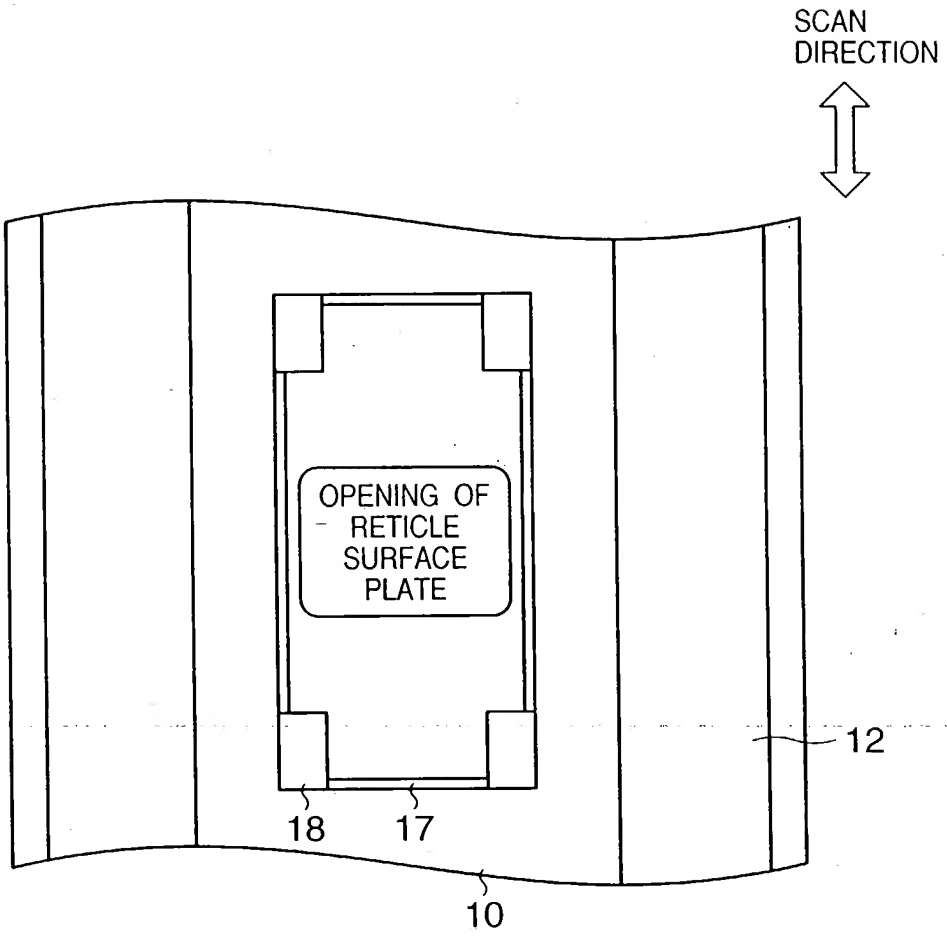

6
14
15
RETICLE
REFERENCE
MARK
OPENING OF
RETICLE
HOLDER
13
12
7
SCAN
DIRECTION
10
B-B

FIG. 1C



C-C

FIG. 2A

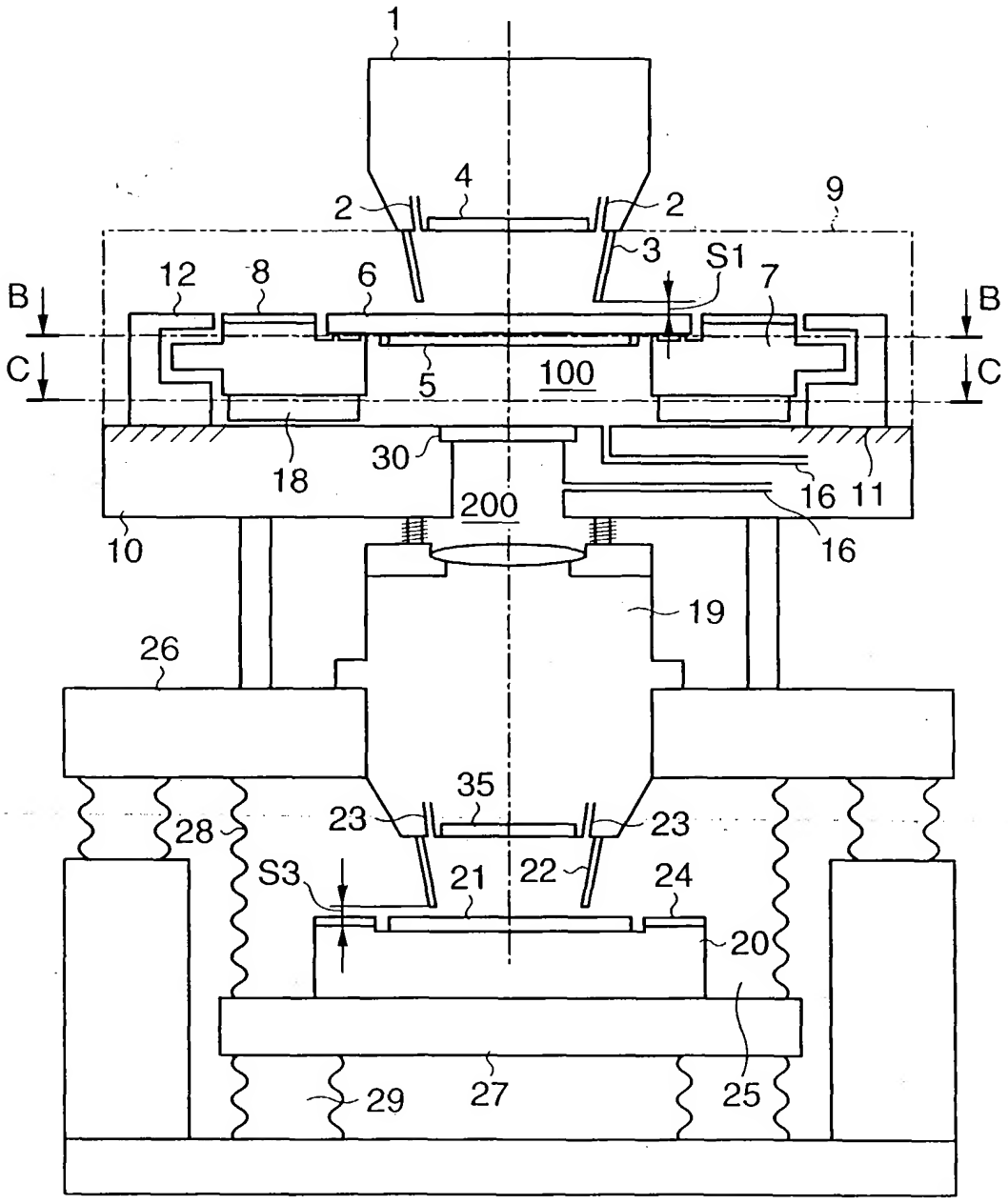

1
4
2
2
9
3
S1
12
8
6
7
B
B
C
C
5
100
18
30
16
11
200
10
16
19
26
35
23
23
28
S3
21
22
24
20
29
27
25

FIG. 2B

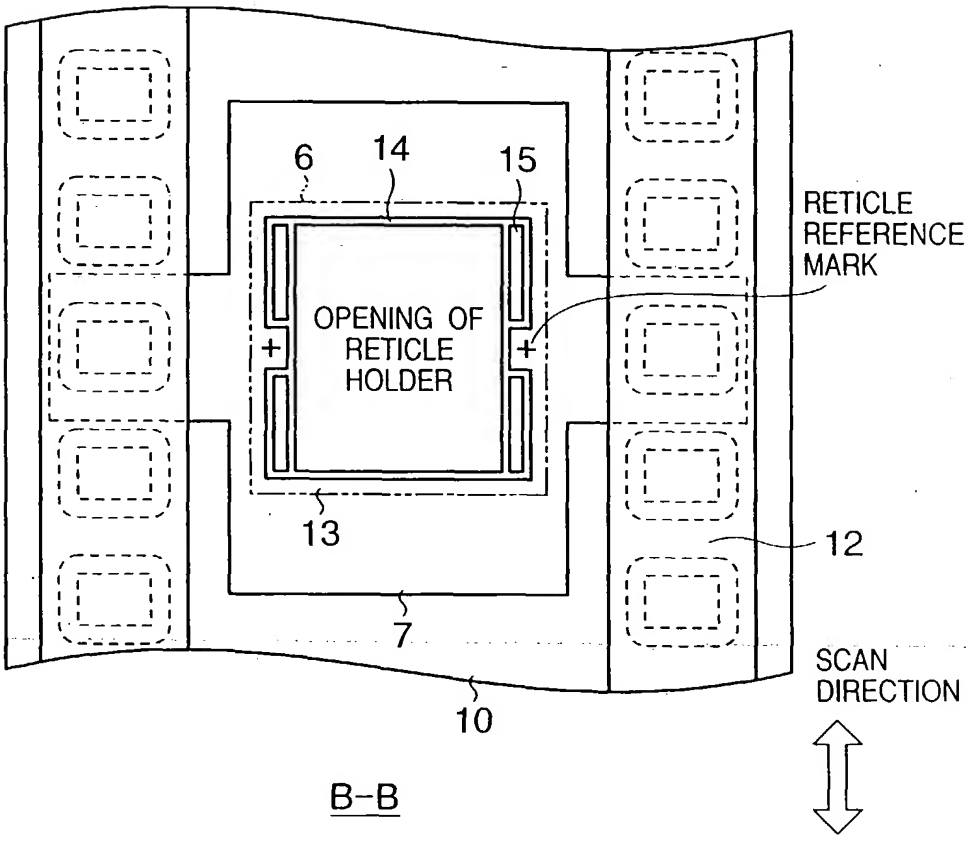
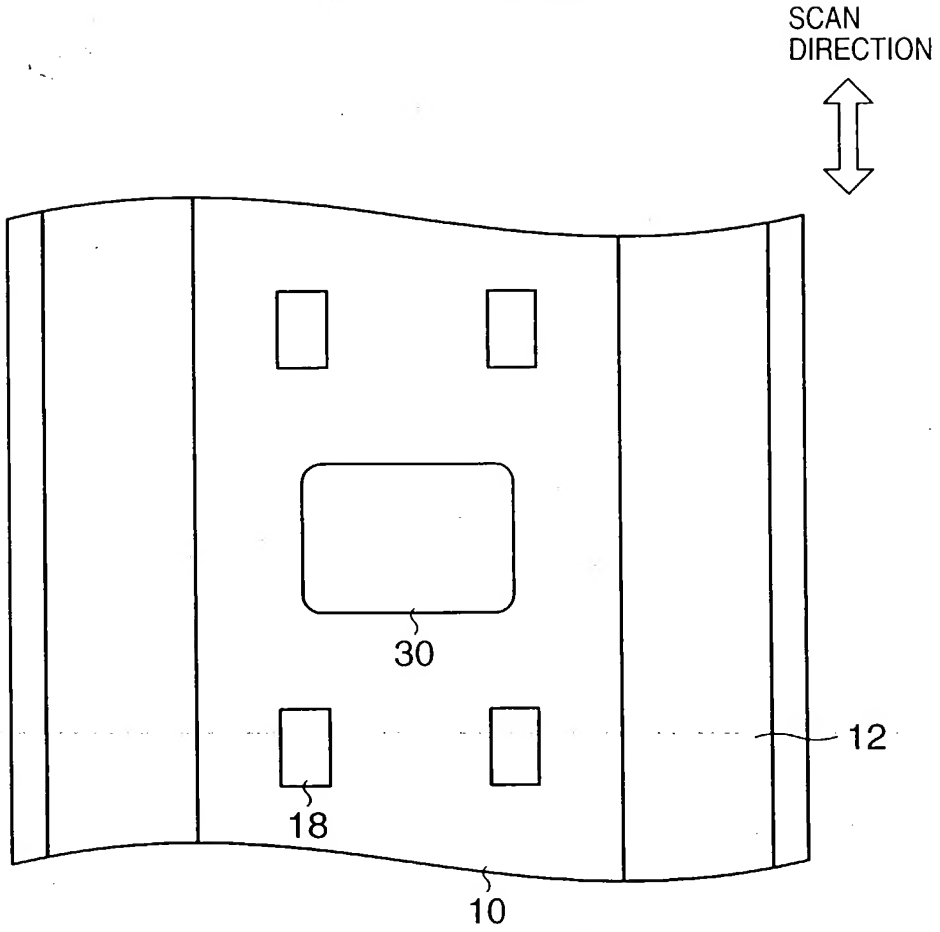

6
14
15
RETICLE
REFERENCE
MARK
OPENING OF
RETICLE
HOLDER
13
12
7
SCAN
DIRECTION
10
B-B

FIG. 2C



B-B

FIG. 3A

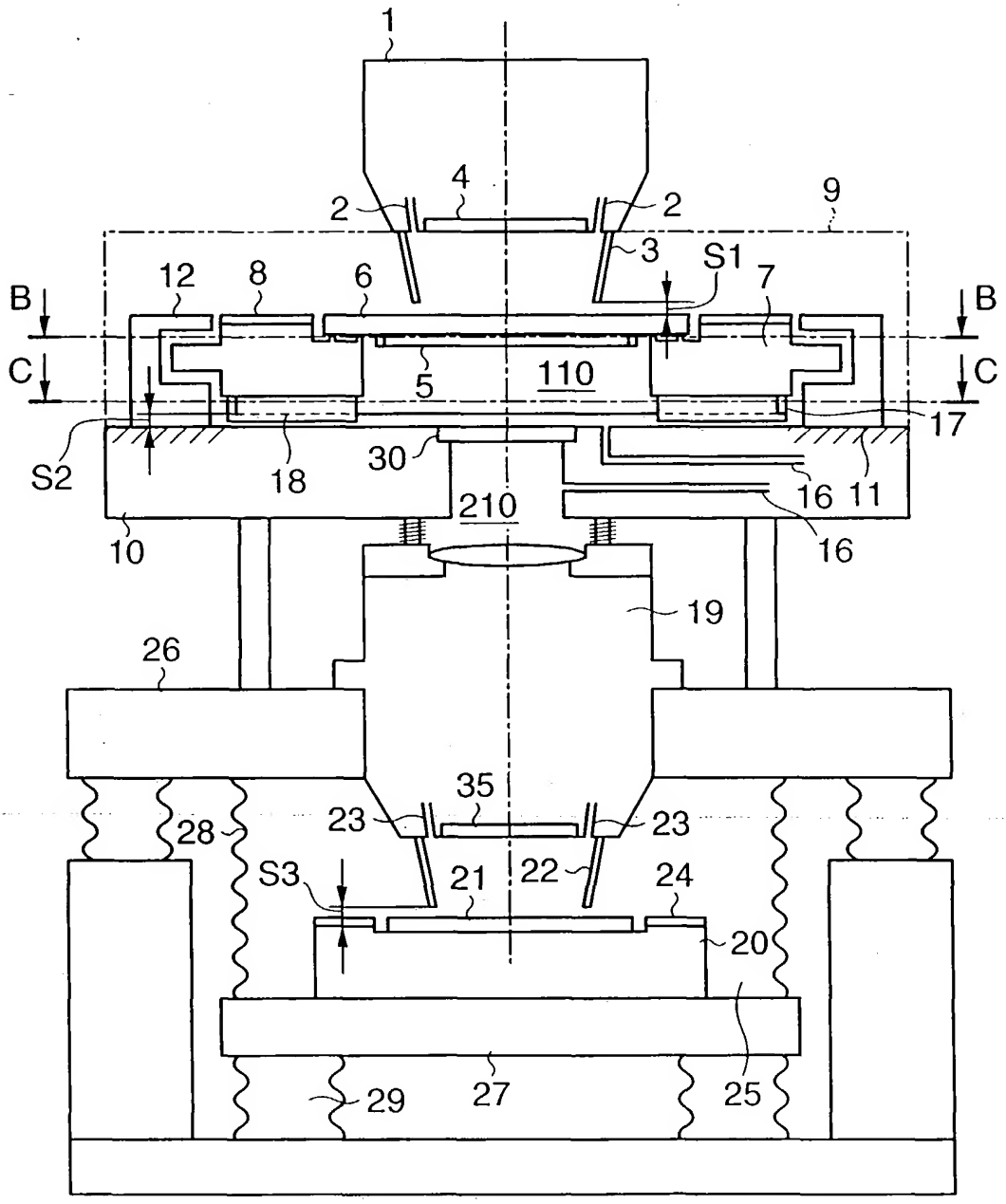

1
4
2
2
9
3
S1
12
8
6
7
B
B
C
C
5
110
17
S2
18
30
16
11
210
10
16
19
26
35
28
23
23
S3
21
22
24
20
29
27
25

FIG. 3B

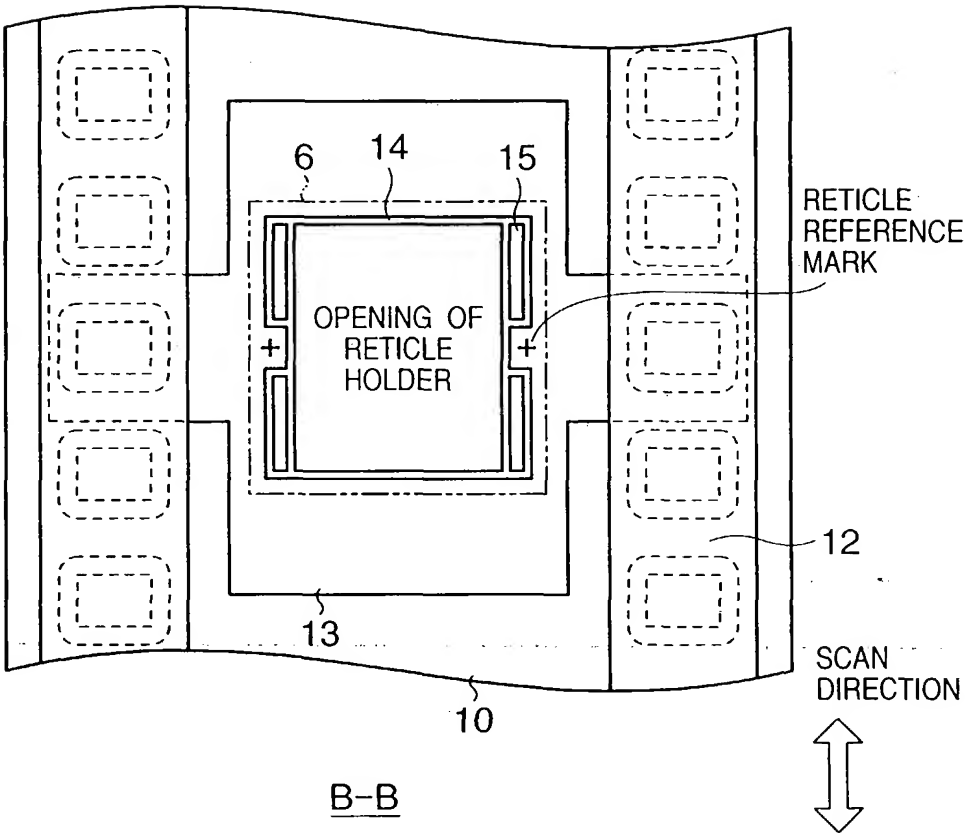
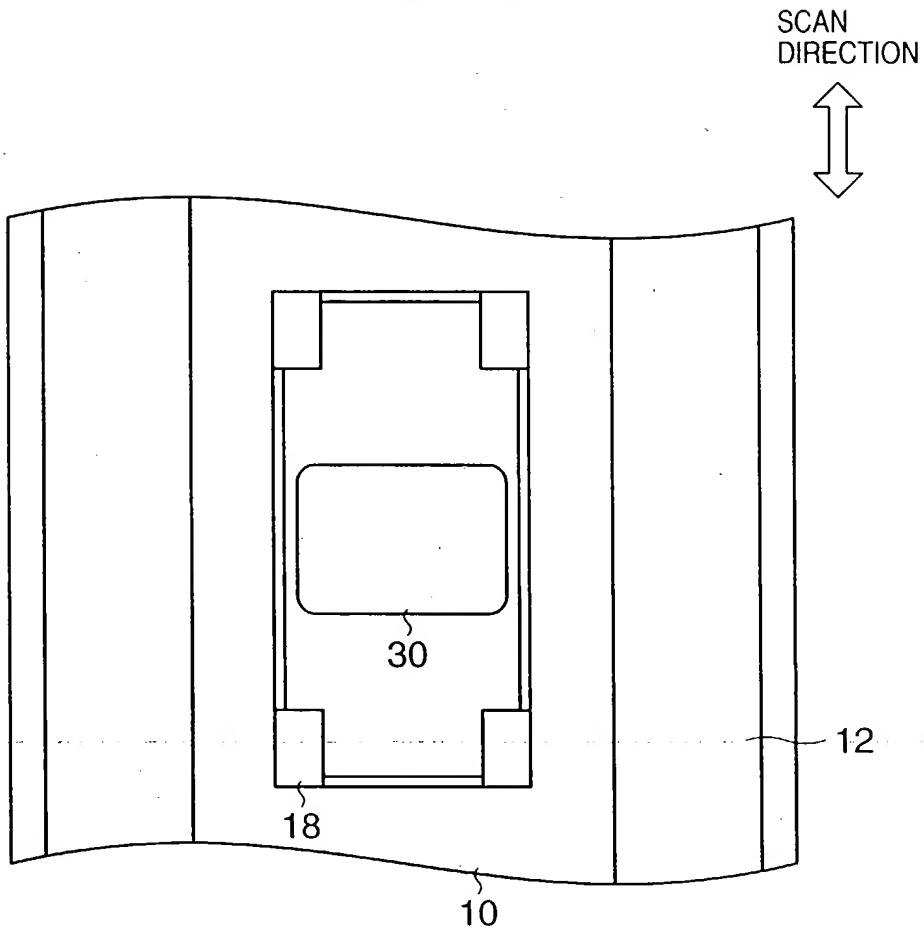

6
14
15
OPENING OF RETICLE HOLDER
RETICLE REFERENCE MARK
12
13
10
SCAN DIRECTION
B-B

FIG. 3C



C-C

FIG. 4

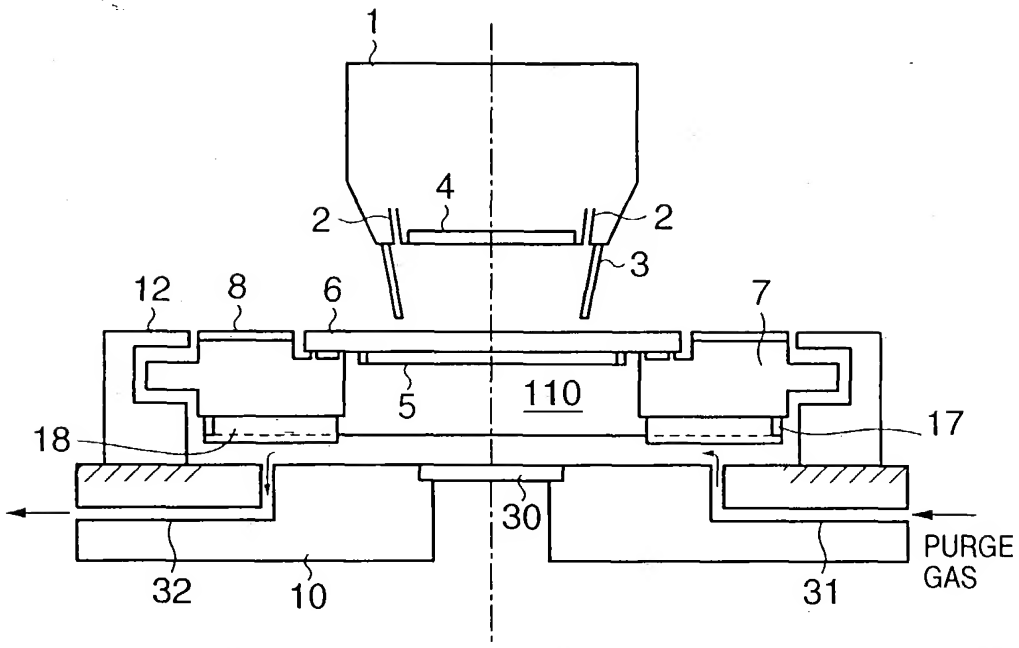


FIG. 5

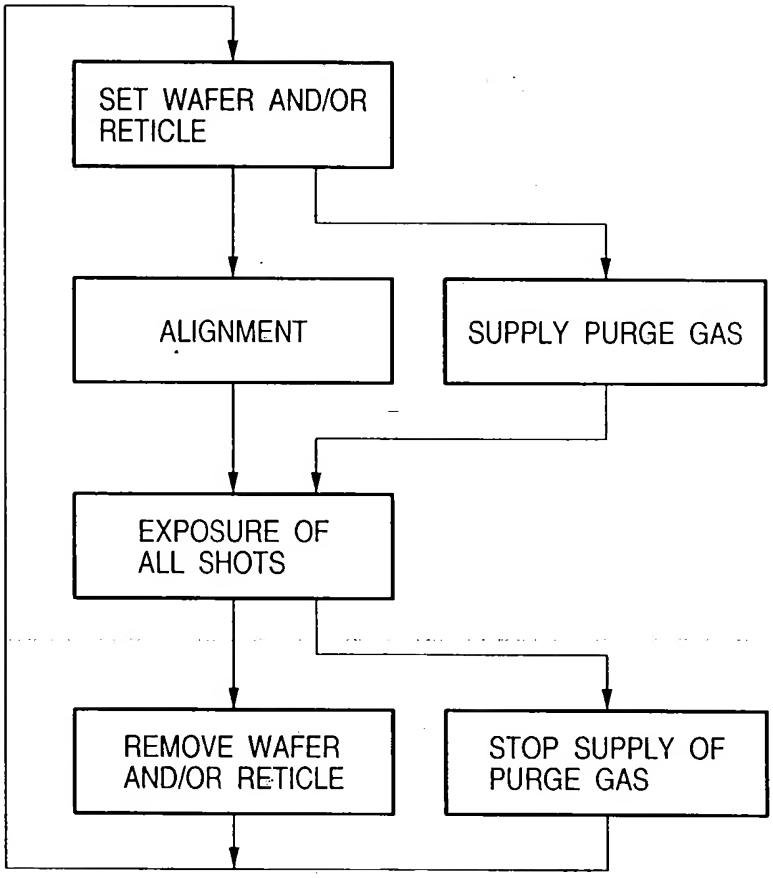

SET WAFER AND/OR RETICLE
ALIGNMENT
SUPPLY PURGE GAS
EXPOSURE OF ALL SHOTS
REMOVE WAFER AND/OR RETICLE
STOP SUPPLY OF PURGE GAS

FIG. 6A

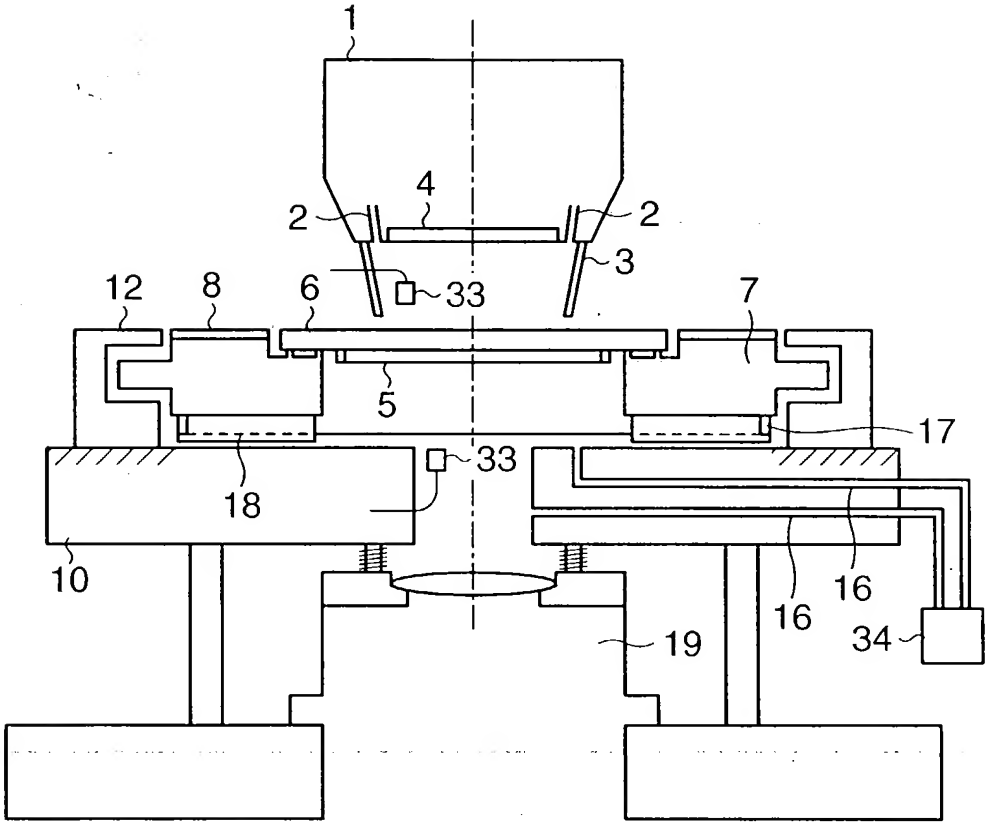


FIG. 6B

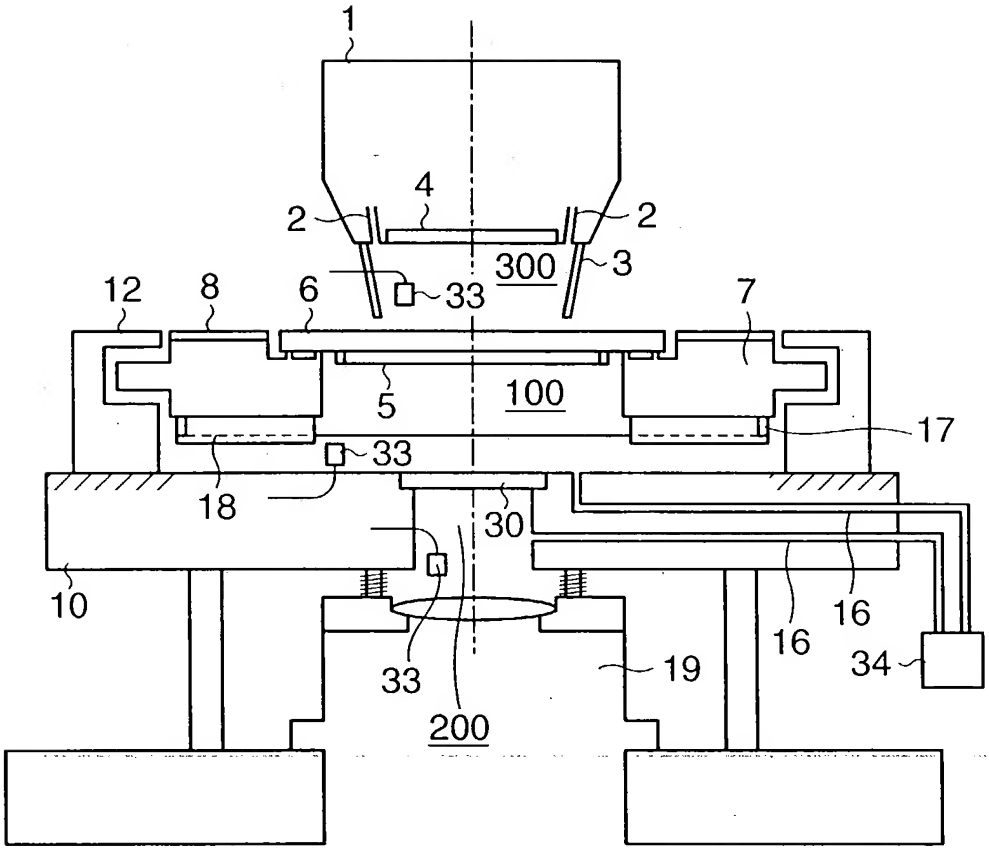


FIG. 7

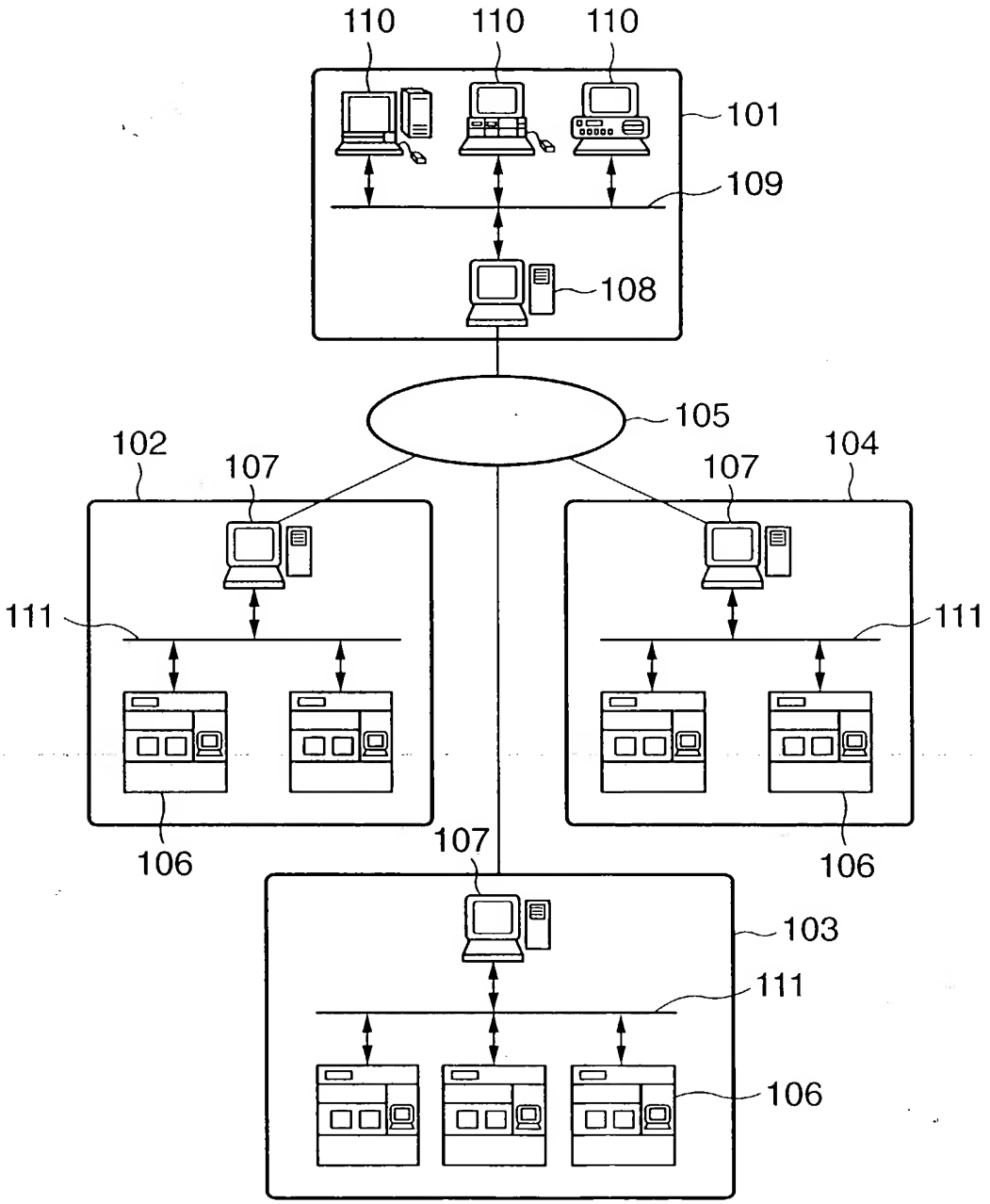

110
110
110
101
109
108
105
102
107
107
104
111
111
106
107
106
103
111
106

FIG. 8

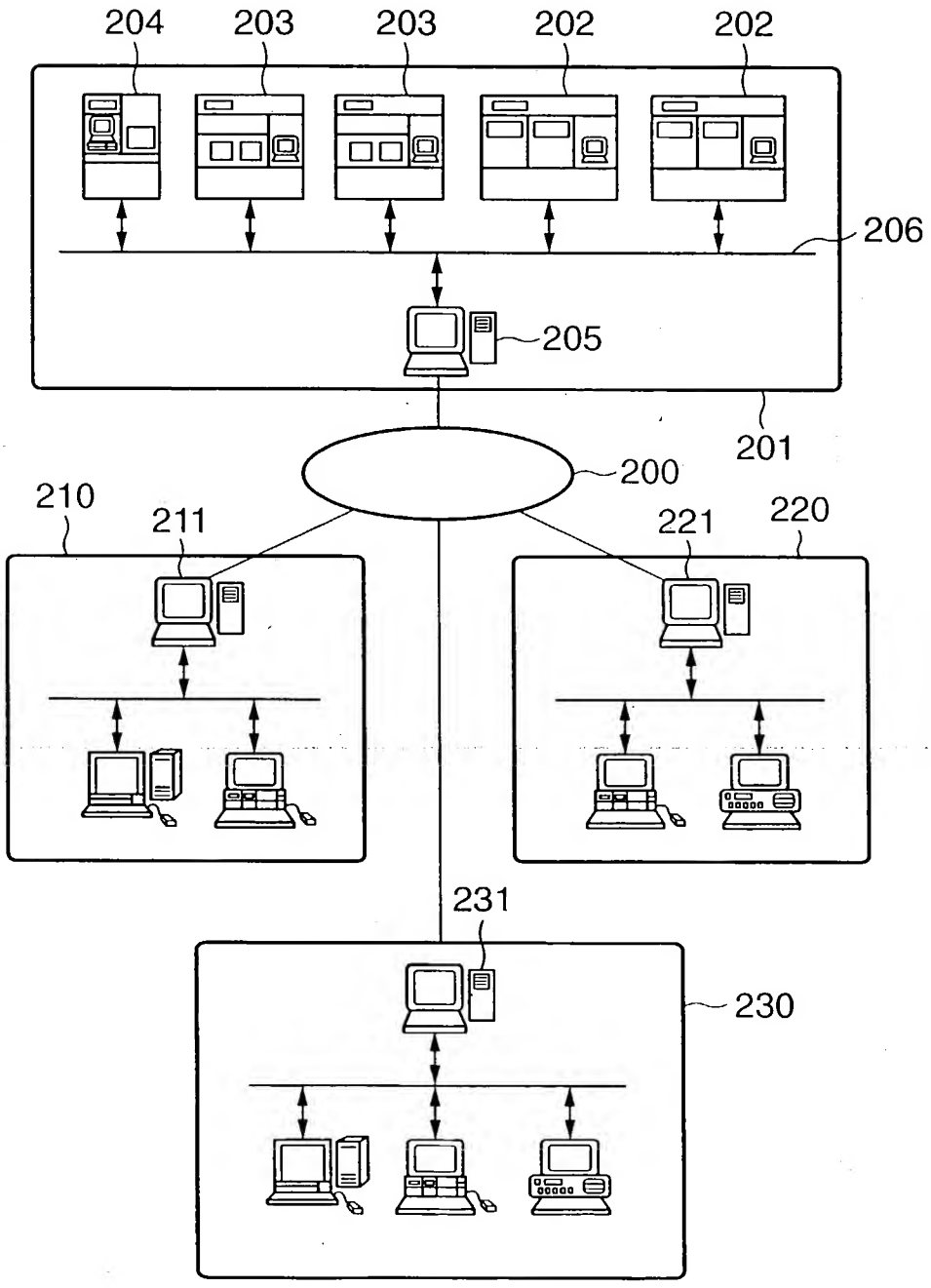


FIG. 9

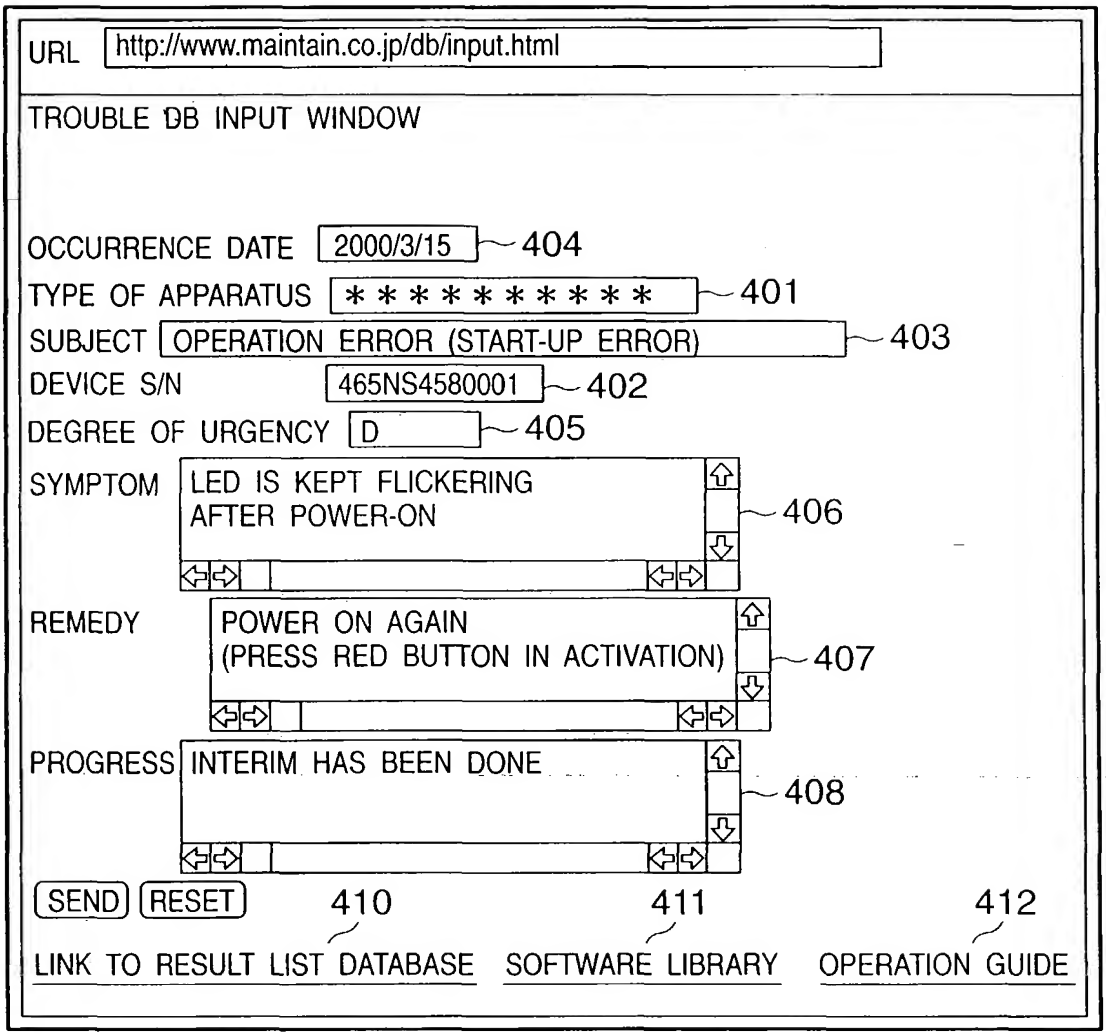
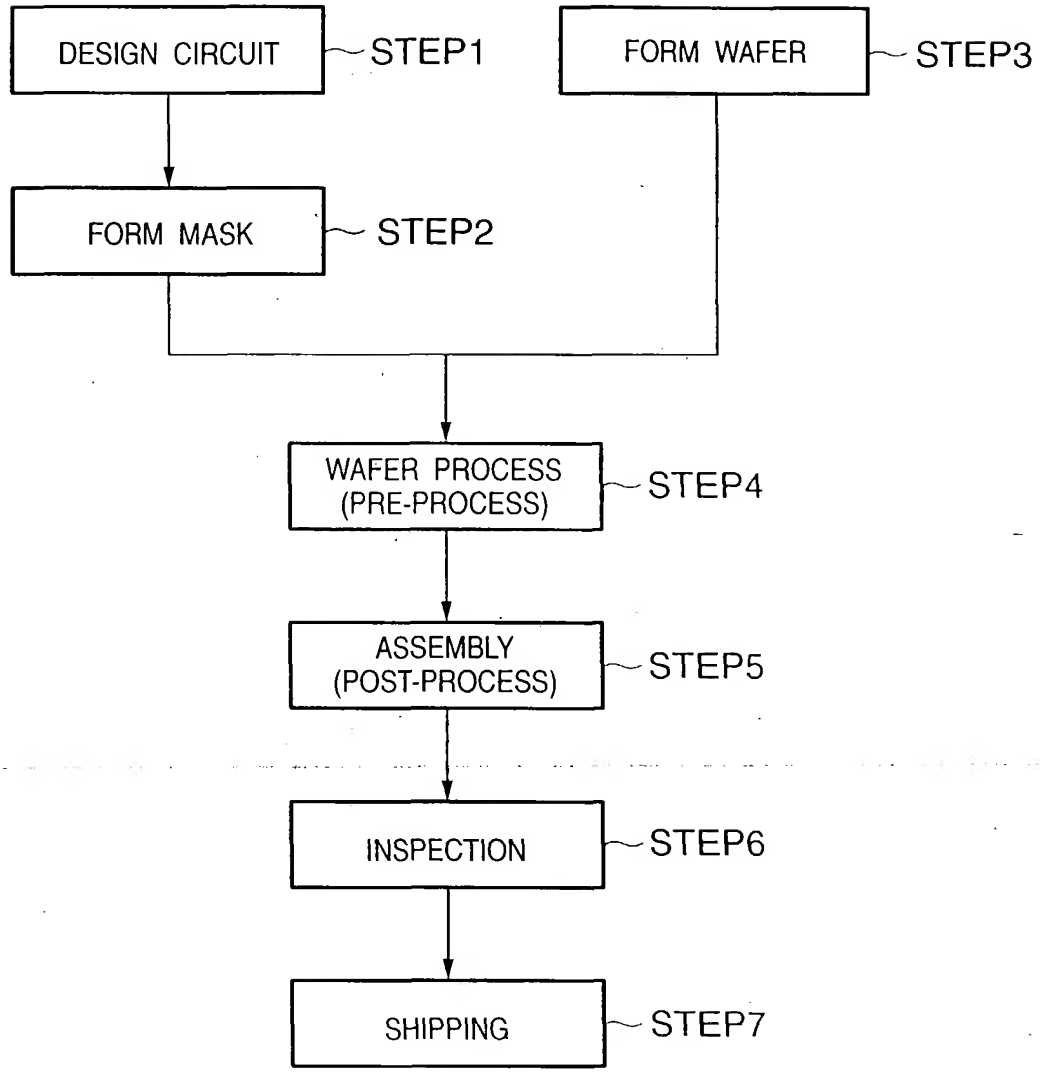
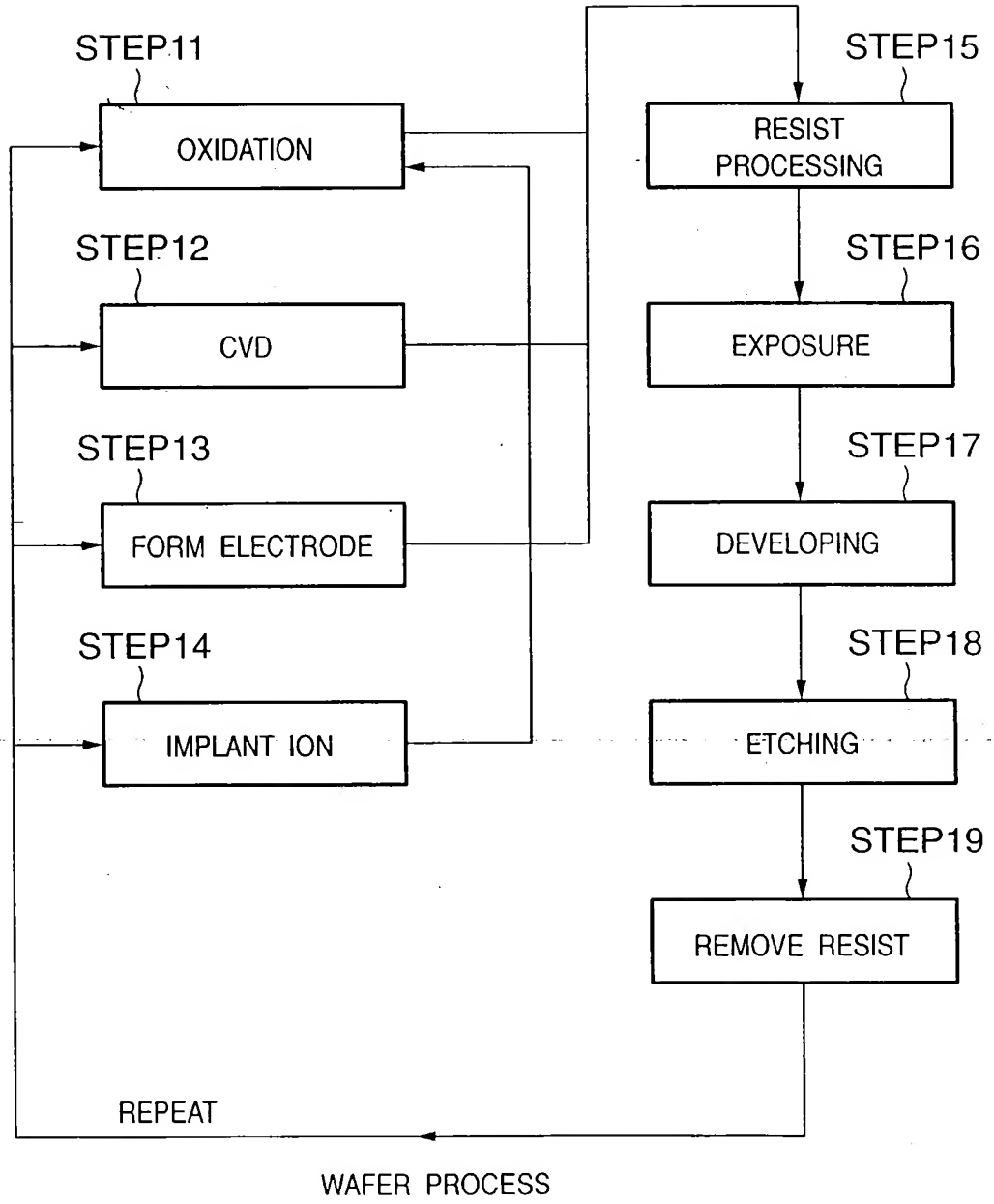

URL
http://www.maintain.co.jp/db/input.html
TROUBLE DB INPUT WINDOW
OCCURRENCE DATE
2000/3/15
404
TYPE OF APPARATUS
****
401
SUBJECT
OPERATION ERROR (START-UP ERROR)
403
DEVICE S/N
465NS4580001
402
DEGREE OF URGENCY
D
405
SYMPTOM
LED IS KEPT FLICKERING
AFTER POWER-ON
406
REMEDY
POWER ON AGAIN
(PRESS RED BUTTON IN ACTIVATION)
407
PROGRESS
INTERIM HAS BEEN DONE
408
SEND
RESET
410
411
412
LINK TO RESULT LIST DATABASE
SOFTWARE LIBRARY
OPERATION GUIDE

FIG. 10



SEMICONDUCTOR DEVICE MANUFACTURING FLOW

FIG. 11


STEP11
OXIDATION
STEP12
CVD
STEP13
FORM ELECTRODE
STEP14
IMPLANT ION
STEP15
RESIST PROCESSING
STEP16
EXPOSURE
STEP17
DEVELOPING
STEP18
ETCHING
STEP19
REMOVE RESIST
REPEAT
WAFER PROCESS

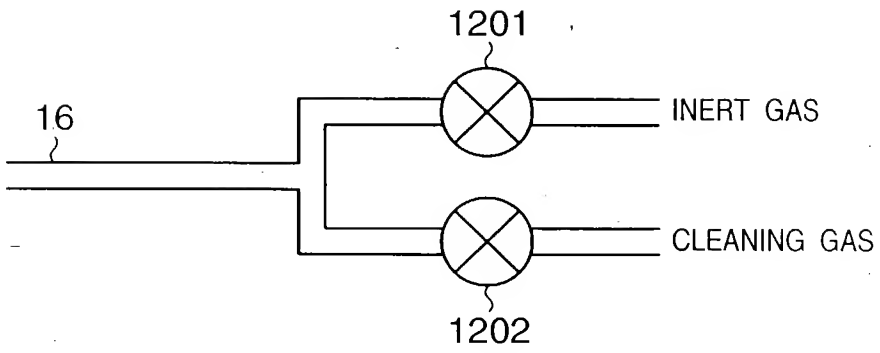



FIG. 12